L	Hits	Search Text	DB	Time stamp
Number	1.55			2004/05/25
1	462	BiMOS and @ad<20020614	USPAT;	2004/05/07
_		(2)	US-PGPUB	16:58
2	232	(BiMOS and @ad<20020614) and base and	USPAT;	2004/05/07
		emitter and source and drain and	US-PGPUB	16:56
_		transistor	<u>-</u>	0004/05/05
3	86		USPAT;	2004/05/07
		emitter and source and drain and	US-PGPUB	16:17
	1	transistor) and buried		
4	86	'''	USPAT;	2004/05/07
		emitter and source and drain and	US-PGPUB	16:17
		transistor) and buried) and (gate or		
		electrode)		
5	60	(BiMOS and @ad<20020614) and base and	USPAT;	2004/05/07
		emitter and source and drain and	US-PGPUB	16:50
		transistor and (gate with contact)		1
6	41	1 ' '	USPAT;	2004/05/07
		emitter and source and drain and	US-PGPUB	16:56
		transistor and (gate with contact)) and		
	İ	(gate with polysilicon)		
7	2449	base and emitter and source and drain and	USPAT;	2004/05/07
		transistor and collector and buried and	US-PGPUB	16:58
		(gate or electrode)		
8	2324	(base and emitter and source and drain	USPAT;	2004/05/07
		and transistor and collector and buried	US-PGPUB	16:58
		and (gate or electrode)) and @ad<20020614		
9	2324	((base and emitter and source and drain	USPAT;	2004/05/07
		and transistor and collector and buried	US-PGPUB	16:58
		and (gate or electrode)) and		
		@ad<20020614) and (deep wtih collector)		
10	265	((base and emitter and source and drain	USPAT;	2004/05/07
		and transistor and collector and buried	US-PGPUB	16:58
		and (gate or electrode)) and		
		@ad<20020614) and (deep near3 collector)		
11	260	(((base and emitter and source and drain	USPAT;	2004/05/07
		and transistor and collector and buried	US-PGPUB	17:00
		and (gate or electrode)) and		
		<pre>@ad<20020614) and (deep near3 collector))</pre>		
		and ((contact or electrode) near3		
		(emitter or base or collector or source		
		or drain or gate or electrode))		
12	258		USPAT;	2004/05/07
		and transistor and collector and buried	US-PGPUB	17:00
		and (gate or electrode)) and		
İ		@ad<20020614) and (deep near3 collector))		İ
[and ((contact or electrode) near3		
		(emitter or base or collector or source		
		or drain or gate or electrode))) not		
		(((BiMOS and @ad<20020614) and base and		
		emitter and source and drain and		
1		transistor and (gate with contact)) and		
		(gate with polysilicon))		

L Number	Hits	Search Text	DB	Time stamp
Number 1	2	emitter with "III/VI"	USPAT;	2004/05/07
*	2	emittel with lil/vi	US-PGPUB	17:53
2	2	emitter same "III/VI"	USPAT;	2004/05/07
-	_		US-PGPUB	17:53
3	2	emitter and "III/VI"	USPAT;	2004/05/07
_			US-PGPUB	17:53
4	0	emitter and "III/VI"	EPO; JPO;	2004/05/07
			DERWENT;	17:53
			IBM_TDB	. 1
5	360	emitter and "VI"	EPO; JPO;	2004/05/07
			DERWENT;	17:54
			IBM_TDB	
6	561	emitter same "VI"	USPAT;	2004/05/07
l _		,	US-PGPUB	18:01
7	216	(emitter same "VI") and bipolar	USPAT;	2004/05/07
	154	((emitter same "VI") and bipolar) and	US-PGPUB USPAT;	18:02 2004/05/07
8	154	base and collector and transistor	US-PGPUB	18:03
9	137	(((emitter same "VI") and bipolar) and	USPAT;	2004/05/07
*	13/	base and collector and transistor) and	US-PGPUB	18:03
		@ad<20020614		
10	14949	emitter with (Gas or GaSe or GaTe or InS	USPAT;	2004/05/07
		or InSe or InTe or TlS)	US-PGPUB	18:03
11	6309	(emitter with (Gas or GaSe or GaTe or InS	USPAT;	2004/05/07
		or InSe or InTe or TlS)) and bipolar	US-PGPUB	18:03
12	5332	emitter near3 (Gas or GaSe or GaTe or InS	USPAT;	2004/05/07
		or InSe or InTe or TlS)	US-PGPUB	18:03
13	2335	(emitter near3 (Gas or GaSe or GaTe or	USPAT;	2004/05/07
1	1054	Ins or Inse or InTe or Tls)) and bipolar	US-PGPUB	18:03 2004/05/07
14	1864	((emitter near3 (Gas or GaSe or GaTe or InS or InSe or InTe or TlS)) and bipolar)	USPAT; US-PGPUB	18:03
		and base and collector and transistor	03-16101	10.03
15	1739	(((emitter near3 (Gas or GaSe or GaTe or	USPAT;	2004/05/07
13	1/33	Ins or Inse or InTe or Tls)) and bipolar)	US-PGPUB	18:03
		and base and collector and transistor)		1
		and @ad<20020614		
16	500	((((emitter near3 (Gas or GaSe or GaTe or	USPAT;	2004/05/07
		InS or InSe or InTe or TlS)) and bipolar)	US-PGPUB	18:04
		and base and collector and transistor)		
		and @ad<20020614) and buried and (gate or		
		electrode)	IIGDAE -	2004/05/07
17	412	(((((emitter near3 (Gas or GaSe or GaTe	USPAT; US-PGPUB	2004/05/07 18:04
		or InS or InSe or InTe or TlS)) and bipolar) and base and collector and	03-16100	10.04
		transistor) and @ad<20020614) and buried		
		and (gate or electrode)) and source and		
		drain		
18	350		USPAT;	2004/05/07
		or InS or InSe or InTe or TlS)) and	US-PGPUB	18:04
		bipolar) and base and collector and		
		transistor) and @ad<20020614) and buried		
1		and (gate or electrode)) and source and	[.	
		drain) and MOS	Haban	2004/05/07
19	67		USPAT; US-PGPUB	2004/05/07
		or InS or InSe or InTe or TlS)) and bipolar) and base and collector and	US-FGFUB	10.03
		transistor) and @ad<20020614) and buried		
		and (gate or electrode)) and source and		
		drain) and MOS) and (deep with		
		collector)		
	J	L		•

US-PAT-NO:

6207976

DOCUMENT-IDENTIFIER:

US 6207976 B1

TITLE:

Semiconductor device with ohmic

contacts on compound

semiconductor and manufacture thereof

----- KWIC -----

Brief Summary Text - BSTX (26):

According to another aspect of the present invention, there is provided a

semiconductor device comprising: a substrate having a principal surface; a

collector layer formed on the principal surface of the substrate and made of a

compound semiconductor material of a first conductivity type; a base layer

formed on a partial surface area of the collector layer and made of a compound

semiconductor material of a second conductivity type opposite to the first

conductivity type; an emitter layer formed on a partial surface area of the

base layer and made of a compound semiconductor material of the first

conductivity type; a collector electrode formed on a surface of the collector

layer where the base layer is not formed, the collector electrode being

electrically connected to the collector layer with an ohmic contact; a base

electrode formed on a surface of the base layer where the emitter layer is not

formed, the base electrode being electrically connected to the base layer with

an ohmic contact; an emitter electrode formed on a surface of the emitter layer

and electrically connected to the emitter layer with an ohmic contact; and an

intermediate layer disposed at least one area between the collector electrode

and the collector layer, between the base electrode and the

base layer, or between the emitter electrode and the emitter layer, the intermediate layer being made of a compound material containing Ga as a group III element and S as a group VI element and having a thickness of at least two monolayers or thicker.

Claims Text - CLTX (39):

an intermediate layer disposed at least one area between the collector electrode and the collector layer, between the base electrode and the base layer, or between the emitter electrode and the emitter layer, the intermediate layer being made of a compound material containing Ga as a III group III element and S as a VI group VI element and having a thickness of at least two monolayers or thicker.